

INFORMATION PAPER

ON

HH-60G PANORAMIC NIGHT VISION GOGGLE SYSTEM (PNVG)

1. Background. Night Vision Goggles (NVGs) have been deployed for many years across all branches of the military. The AN/AVS-9 (F4949) is the system most widely utilized by both fixed and rotary-wing aircrews in the United States Air Force for performing after dark operations. Unfortunately, the AN/AVS-9 system only provides the user with an instantaneous 40° circular field of view (FOV). Because of the limited FOV, aggressive head scanning is necessary for maintaining minimal situational awareness during night missions. This scanning creates the possibility for disorientation, neck strain, and fatigue. A number of FOV studies have been performed and indicate that the optimal FOV appears to be between 80° and 100°. The PNVG's 100° x 40° FOV provides a 160% increase in the intensified viewing area over the AN/AVS-9. This system is designed to attach to a standard NVG helmet mount and is useful for both fixed and rotary wing aircraft. The PNVG will also increase resolution from 20/40 to 20/20 while reducing the halo effect when viewing bright lights.

2. Requirement. SAC SORD 309-87-I/II, dated 30 Nov 91; CAF-MAF-AFSOC-AETC ORD 319-93-B, dated 29 Mar 01

3. Impacts If Not Funded. Pilot situational awareness will be degraded with prolonged use of the Night Vision Goggles (F4949) used currently. PNVG's will significantly enhance aircrew safety and performance.

4. Units Impacted.

106 RQW Gabreski Field, NY
129 RQW Moffett Federal Airfield, CA
176 WG Kulis ANGB, AK

5. Contractors. Insight Technology In, Manchester NH

6. Cost.

Units Required**	Unit Cost	Program Cost
90	\$65K	\$5.85M

* Includes 10% spares & TCTO's

** 3080 appropriation